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NOTEWORTHY COLLECTIONS

ARIZONA

ASCLEPIAS OENOTHEROIDES Cham. & Schlecht. (APOCYNACEAE: ASCLEPIADOIDEAE).—Cochise Co.: north of Portal along Noland Rd., ~100 meters north of mile marker 9, San Simon River Valley, east drainage from Chiricahua Mountains, 32°3.137′N, 109°10.882′W, 1329 m/4360 ft, 15 Sep 2003, *McGill 7399* (ASU); southeast of Portal along Portal Rd., ~50 meters northeast of intersection with Sanford Rd., 31°52.97′N, 109°4.15′W, 1295 m/4250 ft, 27 Aug 2006, *Kline 3274* (ARIZ).

Previous knowledge. *Asclepias oenotheroides* is known from adjacent Hidalgo and Grant Counties, New Mexico, but has not been recognized in the Arizona flora until now.

Significance. These collections represent a new state record for Arizona. *A. oenotheroides* (hierba de zizotes, zizotes milkweed) is superficially similar to *A. nyctaginifolia* A. Gray and a recent examination of *Asclepias* specimens (by J. Riser) at ASU reveled that a 2003 collection (*McGill 7399*) originally determined as *A. nyctaginifolia* is actually *A. oenotheroides*—the first record of this species in Arizona. *A. oenotheroides* has since been found (by C. Kline; *Kline 3274*) at another nearby location. While *A. nyctaginifolia* and *A. oenotheroides* are similar, the two species are distinguishable by *A. oenotheroides* having corona hoods approximately twice as long as the anther head and conspicuously tapering towards the base while the corona hoods are approximately three times as long as the anther head and do not taper towards their base in *A. nyctaginifolia* (R. E. Woodson, 1954, The North American species of *Asclepias* L., Annals of the Missouri Botanical Garden 41:1–211). The flowers of *A. oenotheroides* are rather gracile and greenish white to pale yellow while *A. nyctaginifolia* has more robust flowers that are white to greenish white, often with a purple tinge. At this time, *A. oenotheroides* is known in Arizona only from Cochise County, but should also be sought in eastern Graham County.

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ARIZONA

ENNEAPOGON CENCHROIDES (Licht.) C.E. Hubb. (POACEAE).—Santa Rita Experimental Range, Pasture 2SW, 200 m northwest of Rodent Station livestock exclosure, 31°49′N, 110°53′W, elev. 1150 m, 28 September 2006, *Mitchel P. McClaran and Aleta M. Nafus 06-01* (ARIZ).

Previous knowledge. Native to Africa, Arabia, Asia and India, and recently arrived, by unknown mode, in southern Arizona (Reeder, 2003, In: Barkworth (ed.), Flora of North America, Volume 25, p. 287). Previously collected from four southern Arizona mountain ranges: Santa Catalina Mountains since 1976 (*E. Schmutz s.n.* ARIZ 201849), Tucson Mountains since 1989 (*P.D. Jenkins 89-70* ARIZ), Galiuro Mountains in 2000 (*Dana Backer s.n.* ARIZ 354401), and Whitlock Mountains in 2002 (*Michael Chamberland 2013* ARIZ).

Significance. First record of this non-native, annual species on 21,500 ha Santa Rita Experimental Range, where 468 vascular species have been reported since its establishment in 1902 (Medina, 2003, In: McClaran et al. (eds.), Santa Rita Experimental Range: 100 yr (1903 to 2003) of Accomplishments and Contributions, USDA Forest Service RMRS-P-30, p. 141.). We discovered 49 *E. cenchroides* plants within 15 m radius, in a 30 ha area where numerous scientific teams have been measuring grass-mesquite relationships since 2002. Plants were found in a mesquite-grassland vegetation type that included native species *Digitaria californica* (Benth.) Henr., *Ferocactus wislizeni* (Engelm.) Britt. & Rose, *Heteropogon contortus* (L.) Beauv. Ex Roemer & J.A. Schultes, *Kallstroemia grandiflora* Torr. ex A. Gray, *Muhlenbergia porteri* Scribn. ex Beal, and *Prosopis velutina* Woot., and long (>40 y) established non-native species *Eragrostis curvula* (Shrad.) Nees and *E. lehmanniana* Nees. The discovery in 2006 may be related to wet summer conditions following a very dry winter because the species is known to increase during wet summers following severe drought in South Africa (Fynn and O'Connor 2000. J. Appl. Ecol. 37:491). In our area, precipitation at the nearby (<400 m distant) Rodent Station rain gage in summer (June–September) 2006 was 284 mm and only 36 mm in winter (October–May) 2005–2006, which are 136% and 24% of the respective averages since 1922 (McClaran et al., 2002, Santa Rita Experimental Range Digital Database User's Guide, USDA Forest Service RMRS-GTR-100, 13 p.).

All plants were carefully removed in plastic bags to limit further spread because its anemochorous dispersal can be >13 m in a 10 m s^{-1} wind (Ernst et al. 1992. Plant Ecology 102:1.) and its ability to grow in both open grassland and under tree canopy (Smit, 2005, BMC Ecology 5:4) are traits conducive to its spread and establishment in this location (Baker, 1965, In: Baker and Stebbins (eds.). The Genetics of Colonizing Species, Academic Press, New York.). Observations of its rapid spread following arrival in other southern Arizona locations (pers. comm., P. Jenkens, ARIZ), warranted our extermination effort, and continued diligence in future summers.

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CALIFORNIA

PSOROTHAMNUS FREMONTII var. *ATTENUATUS* Barneby (FABACEAE).—San Bernardino County,

California, The Whipple Mountains along the Heritage Road at 34°19.4′N and 114°34.8′W, elevation 500 m; ca. 20 plants growing in four parallel washes on a moderately steep slope near *Ambrosia dumosa*, *Larrea tridentata*, *Eriogonum inflatum* and *Opuntia bigelovii*; *J. D. Adams* (RSA) 9 May 2006. The specimens collected each contained stems, leaves and seed pods. A photograph of a seed pod was submitted to www.calphotos.berkeley.edu.

The seed pods of these plants were covered with sticky exudate that smelled like pine and tar. The clear exudate was amber on older seed pods. There were no glands visible on the seed pods. The seed pods formed after the flowers fell from the racemes. The seed pods formed about 2–3 weeks earlier than *P. fremontii* plants near the Death Valley and Providence Mountains.

These plants had considerable variability in leaf size, ranging from 1 to 3 mm wide and 6 to 15 mm long. The leaves were narrow, such as 3 mm wide by 15 mm long or 1 mm wide by 6 mm long. The plant was found to grow as a bush about 1 m high. The leaves were silvery strigose in many plants. The flowers were purple with red or green calyces.

Previous knowledge. Herbarium specimens labeled as *Psorothamnus fremontii* var. *attenuatus* have been collected from several California locations, but all of these specimens lack seed pods, which are necessary for identification of the variety (Adams and York, 2005, Madrono 52:258–61).

Significance. Because herbarium specimens of previous collections of *Psorothamnus fremontii* lack the seed pods that are necessary for identification, these are the first collections in California that include seed pods and thus can be assigned to *Psorothamnus fremontii* var. *attenuatus*; as a result, these collections extend the documented range of this variety into California.

The author is grateful to Sarah Degroot of the Rancho Santa Ana Botanic Garden, Claremont, CA for supplying map coordinates of the plants examined in this study.

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California

Astragalus kentrophyta var. *ungulatus* M.E. Jones (Fabaceae).—Mono Co., Mono Valley, 0.65 road miles E of state line on highway 167 to Hawthorne, then 2.0 road miles S on E fork of a pole line road, T3N, R29E, S10, 7050 ft. Growing with *Juniperus, Artemisia tridentata* on light-colored clay outcrops, plants prostrate, 6 Jun 1998, Arnold Tiehm 12580 (CAS, NY, RENO).

Previous knowledge. Known from Elko, Eureka, Humboldt, Lander, northern Nye, Washoe, and White Pine counties, Nevada (R.C. Barneby 1989. Fabaceae in A. Cronquist et al. Intermountain Flora 3 part B: 1-279. New York Botanical Garden Bronx, NY and recent collections).

Significance. First record for California and a range extension of about 190 km southwest. Plants were also found in adjacent Mineral Co., Nevada (Tiehm 14987 NMC, RENO).

Berteroa incana L. (Brassicaceae).—Lassen Co., Long Valley, Anderson (Saralegui) Ranch, 2.2 road miles W of highway 395 on highway 70 then 5.5 road miles N on Scott Road, ca. 4900 ft., 39 ° 51′19.3″N, 120 ° 05′41.6″W, WGS-1984. Growing at the edge of dry meadows, plants erect, white flowered, 14 Jul 2005, Arnold Tiehm 15023 (CAS, NY, OSC, RENO, UC, UNLV, WTU and 34 sheets distributed from NY).

Previous knowledge. "...mostly in the northern and central states from Maine to Nevada and Oregon; in Canada from Gaspé and Nova Scotia and to British Columbia (R.C. Rollins. 1993. The Cruciferae of continental North America. Stanford University Press, Stanford, CA.).

Significance. First report for California.

Physaria ludoviciana (Nutt.) O'Kane & Al-Shehbaz (Brassicaceae).—Mono Co., Anchorite Hills, 3.3 road miles ENE of state line on highway 359 from Hawthorne, then 3.6 road miles SW on dirt road, T3N, R29E, S 3,9. 7060 ft., 38°08′13.8″N, 118°46′19.7″W, WGS-1984, growing with *Artemisia tridentata* in areas of compacted silty sand. 26 May 2004, Arnold Tiehm 14462 with Jan Nachlinger (CAS, ISTC, NY, OSC, RENO, UC, UNLV, WTU); 15 Jun 2005, Arnold Tiehm 14986 (CAS, ISTC, NY, OSC, RENO, UC, UNLV, WTU), both collections determined by S. O'Kane, 1-2007.

Previous knowledge. Widespread from Manitoba and Minnesota, south and west to Utah, Eureka and Nye counties, Nevada, and Navajo County, Arizona (Holmgren, N.H. 2005. Brassicaceae pp. 174-419 in N.H. Holmgren, P.K. Holmgren & A. Cronquist. Intermountain Flora: Vascular Plants of the Intermountain West, U.S.A. 2 part B: 1-488. New York Botanical Garden, Bronx, NY.).

Significance. New to California and a range extension of about 240 km SW from Eureka County, Nevada. Searches in adjacent Mineral County, Nevada have been unsuccessful.

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Nevada

Polygala macradenia Gray var. *macradenia* (Polygalaceae).—Clark Co., Ash Creek, Red Rock Canyon National Conservation Area, Spring Mountains, in desert shrub habitat. In sandstone and limestone mixed soils with sandstone outcrops. Associated species: *Krameria erecta, Thymophylla acerosa, Coleogyne ramosissima, Eriogonum fasciculatum* var. *polifolium*, and *Ambrosia dumosa*. UTM 11s 0641228E 4002487N NAD27, 1164 m, 17 April 2006, *Trent M. Draper 58843* (UNLV).

Previous knowledge. This taxon is known to occur in Arizona, New Mexico, Texas and northern Mexico.

Significance. This is the first collection from Nevada and the Mojave Desert. Herbarium records indicate that the closest known population is 150 km to the east in the Hualapai Indian Reservation, Grand Canyon, Mohave County, Arizona. This subshrub, with its diminutive stature and with an appearance similar to that of a small *Coleogyne ramosissima*, can be easily

overlooked. It was not included in Leary and Niles' flora of the area (Leary, P. J. and W. E. Niles. 1996. *Flora of the Red Rock Canyon National Conservation Area.* Unpublished. Community College of Southern Nevada, North Las Vegas, NV). The population is within the protected boundaries (but close to inholdings) of Red Rock Canyon National Conservation Area and is therefore protected from urban encroachment.

Ambrosia confertiflora DC. (ASTERACEAE).—Clark Co., Cold Creek Canyon, Spring Mountains, forming large colonies in a post-fire (burned in 2000) chaparral community, on disturbed limestone soil. Associated species: *Gutierrezia sarothrae, Prunus fasciculata* var. *fasciculata* and *Ceanothus greggii* var. *vestitus.* UTM 11s 0613091E 4029844N NAD27, 1958 m, 6 September 2006, *Trent M. Draper 58839* (UNLV).

Previous knowledge. Ambrosia confertiflora occurs throughout the southern portion of the western United States, eastward to Tennessee, and into Mexico.

Significance. This is the first collection of this species from Nevada and one of the few populations known from the Mojave Desert. (It has previously been reported from the Beaver Dam Mountains, southwest Washington Co., UT [Welsh, S. L., N. D. Atwood, S. Goodrich, and L. C. Higgins. 2003. *A Utah Flora.* Brigham Young University, Provo, UT].)

Sanvitalia abertii Gray (ASTERACEAE).—Clark Co., Cold Creek Canyon, just north of "Sawmill Spring," Spring Mountains, in a post-fire (burned in 2000) chaparral community, in disturbed limestone soil. Associated species: *Gutierrezia sarothrae, Ceanothus greggii* var. *vestitus, Sphaeralcea grossulariifolia, Brickellia oblongifolia* var. *linifolia* and *Hedeoma nana* ssp. *californica.* UTM 11s 0611895E 4029180N NAD27, 2119 m, 4 August 2006, *Trent M. Draper 58837* (UNLV). Specimen determined by W. E. Niles.

Previous knowledge. This taxon was collected once in Las Vegas Wash by National Park Service personnel and identified by W. E. Niles, but no voucher or other documentation was made. The species occurs in California, Arizona, New Mexico, Texas, and Mexico (J. L. Strother. 2006. *In* Flora of North America Editorial Committee, eds., *Flora of North America* 21:1–616. Magnoliophyta: Asteridae, part 8: Asteraceae, part 3. Oxford University Press, New York, NY).

Significance. This is the first collection formally documented from Nevada. The flora of the Spring Mountains is mostly well known, but the area around "Sawmill Spring" has been overlooked, probably due to the presence of nearby private land and the lack of a recognized place name on official maps. "Sawmill Spring" is named for an aging large iron boiler, fly wheels, and pieces of railroad tracks that were used in the operation of a sawmill. The author has collected 11 new Spring Mountains, county, and state records from the area.

Glyceria declinata Breb. (POACEAE).—Clark Co., Cold Creek Canyon, "Sawmill Spring," Spring Mountains, in a post-fire (burned in 2000) fresh water riparian area. In moist dark soil derived from limestone parent material, disturbed by grazing and trampling of elk and feral horses. Associated species: *Juncus longistylis, J. ensifolius* var. *montanus, Schedonorus arundinaceus,* and *Poa pratensis.* UTM 11s 611935E 4029053N NAD27, 2128 m, 6 February 2006, *Trent M. Draper 58596* (UNLV).

Previous knowledge. This European native occurs in northeastern Nevada, California, Oregon, Arizona, Louisiana, and southern British Columbia, Canada (M.E. Barkworth and L.K. Anderson, Grass Manual on the Web at http://herbarium.usu.edu/webmanual/default.htm). In Nevada, the species has only previously been found near Lee, in Elko County.

Significance. This is only the second locality collection from Nevada. The Elko County population (approximately 400 km to the north) was discovered by A.H. Holmgren in 1941. It was treated as *G. occidentalis* in *Intermountain Flora* (Cronquist, A., A. H. Holmgren, N. H. Holmgren, J. L. Reveal, and P. K. Holmgren. 1977. *Intermountain Flora: vascular plants of the intermountain west, USA.* 6: 1–584. Columbia University Press, New York, NY.). The newest generic treatment for the Flora of North America (M. E. Barkworth and L. K. Anderson, Grass Manual on the Web at http://herbarium.usu.edu/webmanual/default.htm) recognizes the Elko County collection as *G. declinata.* The Spring Mountains material may have been introduced in hay fed to feral horses when the area was covered by snow, or from activity associated with a nearby sawmill operation.

Alopecurus geniculatus L. (POACEAE).—Clark Co., Cold Creek Canyon, along a creek fed from "Sawmill Spring," Spring Mountains, in moist limestone derived soil, heavily utilized and disturbed by elk and feral horses. Associated species: *Quercus gambelii, Rosa woodsii* var. *ultramontana,* and *Poa compressa.* UTM 11s 611935E 4029053N NAD27, 2128 m, 4 August 2005, *Trent M. Draper 57821* (UNLV).

Previous knowledge. Alopecurus geniculatus is native to Eurasia and parts of North America (W. J. Crins, Grass Manual on the Web http://herbarium.usu.edu/webmanual/default.htm). Whether the Spring Mountains population is native is uncertain. There are several records of its occurrence in northwest Nevada.

Significance. This is the first collection from Clark County, Nevada. A search of herbarium records in California, Arizona, and Utah indicate that this is the first collection from the Mojave Desert.

Carduus nutans L. (ASTERACEAE).—Clark Co., Cold Creek Canyon, along a creek fed from "Sawmill Spring," Spring Mountains, several plants in moist limestone derived soil, heavily utilized by elk and feral horses. Associated species: *Gutierrezia sarothrae, Oenothera elata* ssp. *hirsutissima, Bromus inermis, Melilotus officinalis,* and *Artemisia tridentata.* UTM 11s 611935E 4029053N NAD27, 2128 m, 4 August 2006, *Trent M. Draper 58832* (UNLV).

Previous knowledge. Carduus nutans is native to Europe and western Asia. This exotic occurs throughout much of the United States and is classified as a noxious weed in Nevada and many other states.

Significance. This is the first collection from Clark County, Nevada and one of few from the Mojave Desert. It may have been introduced in hay fed to feral horses when the area was covered by snow. Because of its invasive potential, all plants were collected and removed from the site.

I would like to thank Wesley E. Niles for his help with distribution records and reviewing the manuscript.

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Nevada

Aegilops triuncialis L. (Poaceae).—Washoe Co., Peavine Mountain, 1.1 road miles NW of Forest Boundary at end of Hoge Road on E side of mountain, T20N, R19E, S21, 5600 ft. Growing in an old burn area, abundant, 30 May 2002, Arnold Tiehm 13899 with John Korfmacher (CAS, NY, OSC, RENO, UNLV, WTU and 35 sheets distributed from NY).

Previous Knowledge. Known from California and Oregon [see herbarium.usu.edu/webmanual].

Significance. First record for Nevada (see Nevada Native Plant Society [NNPS] newsletter 28(7): 6–7. 2002).

Anemone drummondii S. Watson var. *drummondii* (Ranunculaceae).—Washoe Co., Sierra Nevada, Carson Range, unnamed small peak NE of Mud Lake, just off trail to Rose Knob Peak, T17N, R18E, S34, 9650 ft., 39°17′43.8″N, 119°57′01.4″W, WGS-1984, growing on steep E facing, rocky, gravelly, clayey slopes, forming clumps, flowers creamy white, 20 Jul 2005, Arnold Tiehm 15024 with Jan Nachlinger (CAS, NY, OSC, RENO, UNLV, WTU and six sheets distributed from NY).

Previous Knowledge. Known from British Columbia, Washington, Idaho, Oregon, California and in Asia (B.E. Dutton et al. 1997. *Anemone* in Flora of North America Editorial Committee 3: 139–158).

Significance. First record for Nevada. Known from as close as the west side of Lake Tahoe (G.L. Smith. 1973. A flora of the Tahoe Basin and neighboring areas. Wasmann J. Biol. 31: 1–231).

Carex vulpinoidea Michaux (Cyperaceae).—Churchill Co., Lahontan Valley, Fallon, 1 road mile W of Downs Lane on Reservoir Road, T19N, R29E, S28, 3945 ft., growing on the banks of the S- Canal, forming clumps to 0.7 m tall, 29 May 2003, Arnold Tiehm 14217 (CAS, NY, OSC, RENO, UNLV, WTU and 22 sheets distributed from NY).

Previous Knowledge. Widespread in Canada, US, and Mexico. In the western US known from all states except Montana, Nevada, and Utah (L.A. Standley. 2002. *Carex* section *Multiflorae* in Flora of North America Editorial Committee 23: 281–285).

Significance. First record for Nevada (see NNPS newsletter 29[7]: 5–6. 2003).

Cryptantha compacta Higgins (BORAGINACEAE) [*C. ochroleuca* Higgins].—Elko Co., Badlands, 5.5 road miles W of road to Ferber Wash on the main road to Antelope Valley, T26N, R70E, S7, 5580 ft., growing with *Juniperus*, *Artemisia pygmaea* on gullied, light-colored clay hills, forming clumps. 10 Jun 2002, Arnold Tiehm 13989 with Jan Nachlinger (CAS, NY, OSC, RENO, UNLV, WTU).

Previous Knowledge. Known from Beaver, Garfield, Juab, Millard, San Pete, Sevier, and Tooele counties Utah (A. Cronquist. 1984. *Cryptantha* in A. Cronquist et al. Intermountain Flora 4: 223–268. New York Botanical Garden Bronx, NY; S.L. Welsh et al. 1993. A Utah Flora, 2nd ed. Brigham Young University, Provo, UT.).

Significance. First report for Nevada and a west-northwest range extension of about 81 km from Juab County, Utah (B.J. Albee et al. 1988. Atlas of the vascular plants of Utah. Occas. Pap. Utah Mus. Nat. Hist. 7: 1–670 and see earth.gis.usu.edu/plants/index.html).

Cryptantha flaccida (Dougl.) E.L. Greene (BORAGINACEAE).—Washoe Co., 8.5 mi NE of Red Rock, 5000 ft. Juniper, sage, 22 Jun 1938, Dan Tillotson 206 (UC); Dogskin Mountain, 3.4 road miles W of Winnemucca Ranch Road on North Fork Dry Valley Creek Road, NW end of the mountain, T24N, R19E, S6, 4820 ft., growing with *Juniperus* on rocky, silty flats. 30 May 2002, Arnold Tiehm 13893 (CAS, NY, OSC, RENO, UNLV, WTU and 30 duplicates distributed from NY).

Previous Knowledge. Known from "c. and se. Wash. to s. Calif., e. to the w. part of the Snake River Plains in Idaho (Owyhee, Ada, Boise, and Elmore cos.)" (A. Cronquist. 1984. *Cryptantha* in A. Cronquist et al. Intermountain Flora 4: 223–268. New York Botanical Garden Bronx, NY.).

Significance. First report for Nevada and a westward range extension of over 81 km from the nearest known populations in Indian Valley, Plumas County, California (see NNPS newsletter 29[4]: 3).

Euclidium syriacum (L.) R. Br. (BRASSICACEAE).—Nye Co., White River Valley, White River Campground, T6N, R61E, S9, 38°23′17.4″N, 115°08′03.0″W, 5180 ft., growing in disturbed areas in the campground, 1 Jun 2005, Arnold Tiehm 14935 (CAS, NY, OSC, RENO, UNLV, WTU and 7 sheets distributed from NY).

Previous knowledge. "Established sporadically in w. U.S.; in our range [Intermountain Flora range] in c. and n. Utah" (N.H. Holmgren. 2005. Brassicaceae in N.H. Holmgren et al. Intermountain Flora. 2 part B: 174–419. New York Botanical Garden, Bronx, NY.).

Significance. First record for Nevada (see NNPS newsletter 31[8]: 6–7. 2005).

Euphorbia peplus L. (EUPHORBIACEAE).—Washoe Co., Reno, Idlewild Park off of Booth Street, at the northwest end of the west pond, T19N, R19E, S10, 39°31′21.0″N, 119°49′57.4″W, ca. 4500 ft., growing as a weed along the railroad tracks, erect annual, 18 Oct 2005, Arnold Tiehm 15107 (CAS, NY, OSC, RENO, UNLV, WTU and 36 sheets distributed from NY).

Previous knowledge. In the western U.S. it is known from at least California, Oregon, and Utah (A. Cronquist. 1997. Euphorbiaceae in A. Cronquist et al. Intermountain Flora. 3 part A: 260–284. New York Botanical Garden, Bronx, NY.; D.L. Koutnik. 1993. *Euphorbia.* in J.C. Hickman ed. The Jepson Manual. pp 573–576. University of California Press, Berkeley, CA.).

Significance. First record for Nevada. It has been noted in other areas around Reno.

Helminthotheca (*Picris*) *echinoides* (L.) Holub. (ASTERACEAE).—Washoe Co., Reno, University of Nevada, Enterprise Road just W of Children's Behavioral Sciences building, T20N, R19E, S35. 4600 ft., locally common along the road, 25 Jun 1997, Arnold Tiehm 12218 (CAS, NY, OSC, RENO).

Previous knowledge. Known from "Alta., N.B., Ont., Sask.: Ariz., Calif., Conn., D.C., Iowa, Maine, Md., Mass., Mo., Mont., N.J., N.Y., N. Dak., Ohio, Oreg., Pa., Vt., Va.; Europe; widely introduced elsewhere" (J. Strother, 2006. *Helminthotheca* in Flora of North America Editorial Committee 19: 300. Oxford University Press, New York, NY.).

Significance. First record for Nevada (see NNPS newsletter 23[8]: 5. 1997).

Hymenoxys richardsonii (Hook.) Cockerell var. *richardsonii* (ASTERACEAE).—White Pine Co., Badlands, 3.2 road miles S and SE of the county line on main road through the Badlands, T26N, R70E, S33. 5580 ft., growing with *Juniperus, Chrysothamnus parryi* on steep, brown, clay hills, forming clumps from a branched caudex, up to 25 stems per clump, 11 Jun 2002, Arnold Tiehm 14,000 with Jan Nachlinger (CAS, NY, OSC, RENO, UNLV, WTU and 33 duplicates distributed from NY).

Previous knowledge. Known from Alberta and Saskatchewan Canada, to N. Dakota, Wyoming, Colorado, Montana, and Utah (A. Cronquist. 1994. Asteraceae in A. Cronquist et al. Intermountain Flora 5: 1–496. New York Botanical Garden Bronx, NY.; S.L. Welsh et al. 1993. A Utah Flora, 2nd ed. Brigham Young University, Provo, UT.).

Significance. First record for Nevada and a north-northwest range extension of about 130 km from Millard Co., Utah (B.J. Albee et al. 1988. Atlas of the vascular plants of Utah. Occas. Pap. Utah Mus. Nat. Hist. 7: 1–670 and see earth.gis.usu.edu/plants/index.html).

Iris pseudacorus L. (IRIDACEAE).—Washoe Co., Reno, Dry Creek just W of the old Huffaker School at 7495 S. Virginia St., T18N, R20E, S6, 4470 ft., flowers yellow, style column sometimes white, leaves to 2 in wide, forming large clumps to 5 ft. tall, 23 Jun 1997 Arnold Tiehm 12217 (CAS, NY, OSC, RENO).

Previous knowledge. In the Intermountain Region known from the lower Snake River Plains (P.K. Holmgren. 1977. Iridaceae in A. Cronquist et al. Intermountain Flora 6:538–546. Columbia University Press, New York, NY.), Utah (S.L. Welsh et al. 1993. A Utah Flora, 2nd ed. Brigham Young University, Provo, UT.), and in the western U.S. also known from California and Washington (N.C. Henderson. 2002. *Iris* in Flora of North America Editorial Committee 26: 371–395. Oxford University Press, NewYork, NY.).

Significance. First record for Nevada (see NNPS newsletter 23[7]: 2. 1997).

Lythrum tribracteatum Salzm. ex Spreng. (LYTHRACEAE).—Washoe Co., Duck Flat, Duck Lake, on the W side of highway 81 between Gerlach and Cedarville, NE end of the lake, T37N, R18E, S14. 4690 ft., growing on the exposed mud flats at the edge of the lake, plants prostrate, 18 Aug 1998, Arnold Tiehm 12653 (CAS, NY, OSC, RENO, UNLV).

Previous knowledge. Known from California, Idaho, and Utah (A. Cronquist. 1997. Lythraceae pp. 167–170 in A. Cronquist et al. Intermountain Flora 3 part A:167–170. New York Botanical Garden, Bronx, NY.).

Significance. First record for Nevada (see NNPS newsletter 24[8]: 3–4. 1998)

Parthenium ligulatum (M.E. Jones) Barneby (ASTERACEAE).—Eureka Co., Fish Creek Range, foothills on extreme E side, 4.8 road miles S of highway 50 on the Duckwater road, then 0.3 road miles W, T17N, R54E, S19. 6150 ft., growing with *Juniperus, Artemisia nova* on open gravelly brown clay hills, caespitose perennial to 2 dm across, heads sessile, 2 Jun 2001, Arnold Tiehm 13557 with Jan Nachlinger (CAS, NY, RENO, UNLV).

Previous knowledge. Known from Rio Blanco County, Colorado and from Daggett, Duchesne, Emery, Uintah, and Wayne counties, Utah (A. Cronquist. 1994. Asteraceae in A. Cronquist et al. Intermountain Flora 5: 1–496. New York Botanical Garden Bronx, NY.; S. Goodrich & E. Neese 1986. Uinta Basin Flora. USDA Forest Service; J. Strother, 2006. *Parthenium* in Flora of North America Editorial Committee 21: 20–22. Oxford University Press, New York, NY.).

Significance. First report for Nevada and a range extension of over 240 km from the Uinta Basin of northern Utah (see NNPS newsletter 28[5]: 5–6. 2002). I know of no other disjunction quite matching *Parthenium ligulatum.* The closest are: *Astragalus jejunus* S. Watson which is known from SW Wyoming, adjacent Utah and Idaho, and Elko, Nye, and White Pine Counties, Nevada (R.C. Barneby 1989. Fabaceae in A. Cronquist et al. Intermountain Flora 3 part B: 1–279. New York Botanical Garden Bronx, NY); and *Leptodactylon caespitosum* Nuttall, which is known from Nebraska, Wyoming, Utah, and Elko, Eureka, Nye, and White Pine Counties, Nevada (A. Cronquist. 1984. *Leptodactylon* in A. Cronquist et al. Intermountain Flora 4:139–142. New York Botanical Garden Bronx, NY.). Both of these have a few small geographically intermediate populations in Nevada.

Psilocarphus oregonus Nutt. (ASTERACEAE).—Elko Co., Bull Run Mountains, 0.3 road miles W of highway 11A on the road to Bull Run Reservoir, T43N, R52E, S11. 5910 ft, growing in open dried meadow areas, 16 Jul 1984, Arnold Tiehm 9038 with Barbara Ertter (CAS, NY); Elko Co., Owyhee Desert, 1.3 road miles WNW of Butte Springs on Bob Johnson Road past Hat Peak, T46N, R49E, S11, 5155 ft., growing with *Artemisia tridentata* in dry creek beds on silty flood plains, plants abundant, 10 Jun 1999, Arnold Tiehm 12883 with Jan Nachlinger (CAS, NY, RENO); Washoe Co., Mosquito Mountains, 2.0 road miles E of the state line on road from Fee Reservoir to Crooks Lake, T45N, R18E, S16, 5750 ft., growing with *Artemisia tridentata*, along small clay soiled drainages that are wet early in the year and then dry to an impenetrable "adobe", 7 Jun 2000, Arnold Tiehm 13181 with Gary Schoolcraft (CAS, NY, RENO).

Previous knowledge. "Eastern Washington, eastern Oregon, and adjacent Idaho, west into the Klamath region of southwest Oregon, and south through California. . ." (A. Cronquist. 1994. Asteraceae in A. Cronquist et al. Intermountain Flora 5: 1–496. New York Botanical Garden Bronx, NY.).

Significance. First collections for Nevada. These are the basis for Nevada being listed in Flora North America (J.D. Morefield. 2006. *Psilocarphus* in Flora of North America Editorial Committee 19: 456–460. Oxford University Press, New York, NY.).

Rotala ramosior (L.) Koehne (LYTHRACEAE).—Washoe Co., Pyramid Lake Indian Reservation, Truckee River just upstream from the fish

hatchery between Nixon and Wadsworth, T22N, R24E, S30, 4000 ft., growing at the edge of a drying slough along the river, rooted in the water, 28 Sep 2000, Arnold Tiehm 13414 (RENO); Washoe Co., Washoe Valley, 1.6 road miles N of Bellview Overpass on highway 395, W of highway, T16N, R19E, S11, 5000 ft., 39°16′13.9″N, 119°40′08.0″W, WGS-1984, growing at the edge of ponds, 15 Aug 2006, Arnold Tiehm 15266 (CAS, NY, OSC, RENO, UNLV, WTU and 12 sheets to be distributed from NY).

Previous knowledge. In the western U.S. known from California, Idaho, Oregon, and Washington (A. Cronquist. 1997. Lythraceae pp. 167–170 in A. Cronquist et al. Intermountain Flora 3 part A:167–170. New York Botanical Garden, Bronx, NY.; E. McClintock. 1993. Lythraceae pp. 745–746 in J.C. Hickman. The Jepson Manual. Higher plants of California. University of California Press, Berkeley, CA.).

Significance. First record for Nevada (see NNPS newsletter 32[8]: 3. 2006.

Schedonnardus paniculatus (Nutt.) Trel. (POACEAE).—Washoe Co., Reno, Rancho San Rafael Park on NW corner of N. Virginia and N. McCarran, S of the Basque Monument, T20N, R19E, S34, 39°33′10.5″N, 119°49′53.3″W, WGS-84, 4700 ft., growing at the edge of moist areas near meadows, forming large colonies, Arnold Tiehm 14539 (CAS, NY, OSC, RENO, UNLV, WTU).

Previous knowledge. "*Schedonnardus* in a monotypic North American genus that grows in the prairies and central plains of Canada, the United States, and northwestern Mexico. It has also been found, as a recent introduction, in California and Argentina" (N. Snow. 2003. *Schedonnardus* in Flora of North America Editorial Committee. 25: 228–230. Oxford University Press, New York, NY.).

Significance. First record for Nevada (see NNPS newsletter 30[7]: 6–7. 2004).

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Oregon

Eriogonum umbellatum Torrey var. *glaberrimum* (Gandoger) Reveal (POLYGONACEAE).—Jackson Co., Grizzly Peak plateau at the southern edge, 42°15.94′N, 122°37.17′W, elevation 1,760 m, on thin rocky-to-lithic basaltic andesite soil, a population of about 30 plants scattered on a large herbaceous flat with *Lomatium macrocarpum, Erigeron bloomeri, Sedum oregonense, Lupinus lepidus* var. *lobbii, Lewisia nevadensis*, and *Allium siskiyouense*, first collected 1 August 2006, *J. T. Duncan*, verified by J. L. Reveal from a specimen sent to him.

Previous knowledge. Known from the Warner Mountains in Lake County, OR and Modoc County, CA, plus one nineteenth century collection reported from Klamath County, OR (J. L. Reveal, *Eriogonum*, in Flora of North America, Volume 5, p. 353, 2005); based on the Oregon Plant Atlas of the Oregon Flora Project, known from five sites in Lake County along with an unverified report of it on Steens Mountain in Harney County.

Significance. First report from Jackson County and any site west of the Cascade divide. This represents a range extension of at least 150 km west of the nearest sites reported by the Oregon Plant Atlas.

Lomatium hendersonii (Coulter & Rose) Coulter & Rose (APIACEAE).—Jackson Co., Grizzly Peak plateau along western edge, two populations ca. 0.8 km apart: 1) 42°15.64′N, 122°37.58′W, elevation 1,750 m, on thin rocky-to-lithic basaltic andesite soil, a population of around 100 plants spread over an area of more than 100 m on an open flat with *Lomatium dissectum, L. macrocarpum, L. nudicaule, L. utriculatum, Ericameria nauseosa, Eriogonum nudum* var. *oblongifolium, and Penstemon duestus*, first seen and collected (in flower) on 11 May 2000; and 2) 42°16.03′N, 122°37.52′W, elevation 1,760 m, on thin rocky basaltic andesite soil, a population of a few hundred plants spread over an area of around 200 m (north and south) on a rough rocky, flat with *Lomatium dissectum, L. macrocarpum, Pinus ponderosa, Arctostaphylos patula, Eriogonum nudum* var. *oblongifolium, E. umbellatum* var. *modocense, and Holodiscus microphyllus*, first seen and collected (in fruit) 11 June 1997 (collected in flower 18 May 2001) , *J. T. Duncan*, determined by the late S. Sundberg (OSU) 2002.

Previous knowledge. Based on the Oregon Plant Atlas of the Oregon Flora Project, known in Oregon from one site in Klamath County (southeastern part, Horsefly Valley near Lorella), several sites in Lake and Harney Counties and some additional sites farther east or north.

Significance. First report from Jackson County and any site west of the Cascade divide. This represents a range extension of ca. 140 km west of nearest known site.

Lomatium canbyi (Coulter & Rose) Coulter & Rose (APIACEAE).—Jackson Co., Cascade-Siskiyou National Monument, along BLM Rd 40-3E-30.0 ca.1 km west of junction with BLM Rd 40-3E-5, 42°03.10′N, 122°30.88′W, elevation 1,680 m, in coarse gravelly soil on a south-facing slope immediately south of a large borrow pit (for quarrying the same gravel), with *Lomatium macrocarpum, Chaenactis douglasii, Crepis bakeri, Arabis oregana, Cercocarpus ledifolius, Allium siskiyouense*, and *Fritellaria glauca*, collected in flower 28 May 2000, *J. T. Duncan*, verified by the late S. Sundberg (OSU) 2002.

Previous knowledge. Based on the Oregon Plant Atlas of the Oregon Flora Project known in Oregon from the south and west sides of Summer Lake in Lake County as well as additional sites farther east in Lake County and beyond to the east or north.

Significance. First report from Jackson County and any site west of the Cascade divide. This represents a range extension of ca. 170 km west of nearest known site.

—James T. Duncan, 692 B Street, Ashland, OR 97520-2026.

Oregon

Pyrrocoma liatriformis Greene. (ASTERACEAE).—Wallowa Co., Precious Lands Wildlife

Management Area, northeast Oregon canyon grasslands with *Pseudoroegneria spicata*, *Festuca ovina* var. *ingrata*, *Poa sandbergii*, *Solidago salebrosa*, *Gentiana affinis*, *Balsamorhiza sagittata*, *Erigeron speciosus*, *Achillea millefolium*, and *Eriogonum compositum*, T6N, R45E, S36, SW1/4, approximately 92 plants, elev. 853 m, 30 August 2005, *A. Sondenaa 676* (SRP); T5N, R45E, S12, NW1/4, approximately 50 plants, elev. 1250 m, 4 August 2005, *B. McClarin 05-0646* (OSC); T6N, R44E, S13, NW1/4, 7 plants, elev. 1128 m, 01 September 2005, *B. McClarin*, no voucher collected due to small population size.

Previous knowledge. A Palouse Prairie endemic confined to grassy hillsides and prairies in southeast Washington and adjacent Idaho (D. Bogler, *Pyrrocoma*, pp. 413–424 *in* Flora of North America Vol. 20, Oxford University Press, New York, NY, 2006). Many populations likely extirpated by cultivation of lands for agriculture. There were 80 extant populations in Idaho and Washington as of 2005 (K. Gray, et al., Updated Palouse goldenweed (*Pyrrocoma liatriformis*) occurrences on BLM land, Craig Mountain, Idaho, Idaho Fish and Game, Boise, ID, 2005).

Significance. First report for Oregon. This species is a former federal candidate for threatened status that is currently on the U.S. Fish and Wildlife Service's Species of Concern list (M. Mancuso, Palouse goldenweed (*Haplopappus liatriformis*) monitoring at Craig Mountain - 1996 results, Idaho Fish and Game, Boise, ID, 1997). *Pyrrocoma liatriformis* is considered Threatened in Washington with a Natural Heritage rank of G2 indicating it is imperiled because of rarity or vulnerability to extinction (Washington Natural Heritage Program, Endangered, threatened and sensitive vascular plants of Washington, Department of Natural Resources, Olympia, WA, 1997). Now that this rare species has been documented for northeast Oregon grasslands, Federal land managers for the U.S. Forest Service and Bureau of Land Management should initiate surveys and consider potential impacts to this species when conducting National Environmental Policy Act (NEPA) analysis for land management activities.

The field work leading to this report was funded by the Bonneville Power Administration and a Tribal Landowner Incentive Grant from the U.S. Fish and Wildlife Service.

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Texas

Proboscidea sabulosa Correll (MARTYNIACEAE).—Hudspeth Co., about 1.0 mile north of Texas highway 20 and about 0.5 mile east of Acala Road, 31°20′0.20″N, 105°54′16.4″W, 1089 m, 20 September 2006, *Gutierrez 1225*, *with Gutierrez* (ASU with photos, BRIT, CAS, DES, NMC, NY, RM, RSA, SRSC, UTEP). About 20 plants observed in the area with *Portulaca oleracea*, *Portulaca halimoides*, *Cuscuta umbellata*, *Amaranthus acanthochiton*, *Tidestromia lanuginosa*, *Proboscidea parviflora*, *Heliotropium convolvulaceum*, *Gutierrezia sarothrae*, *Pectis papposa*, *Verbesina encelioides*, *Mollugo cerviana*, *Bouteloa aristidoides*, *Bouteloua barbata*, *Munroa squarrosa*, *Psorothamnus scoparius*. Chihuahuan desert scrub in deep sand dunes dominated by *Prosopis glandulosa* var. *torreyana*, *Larrea tridentata*, and *Psorothamnus scoparius*.

Previous knowledge. The type locality is in Crane County, Texas (D. S. Correll, 1966, Some Additions to the Flora of Texas, Rhodora 68: 427–428). Subsequent collections were made in Ward and Winkler Counties, Texas, in adjacent Lea County, New Mexico, and in Socorro County in central New Mexico (P. K. Bretting, 1982, A systematic and ethnobotanical survey of *Proboscidea* and allied genera of the Martyniaceae, Ph.D. Dissertation, Indiana University). A single specimen was collected by Henrickson (*Henrickson 7497*, TEX) in northern Chihuahua approximately 50 miles from the Hudspeth County collection. All specimens were collected in habitats composed of sand dunes.

Significance. These specimens are the first documented collection from far West Texas. Additional specimens should be looked for in similar sand dune habitats of West Texas and south-central New Mexico.

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Washington

Abronia umbellata Lam. (NYCTAGINACEAE).—Pacific Co: Willapa National Wildlife Refuge, Leadbetter Point Unit, T13N, R11W, S8, NW 1/4 of NW 1/4, USGS 7.5 min. North Cove Quad. Growing in an open sandy environment in habitat restored for Western Snowy Plover (*Charadrius alexandrinus nivosus*). The restored area (currently 26 ha) lies behind a dune east of the ocean beach, and was previously dominated by *Ammophila breviligulata* and *Ammophila arenaria*. *Ammophila* was cleared mechanically and re-growth was treated chemically; the area was also lightly covered with oyster shell from Willapa Bay to maintain open, sparsely vegetated, lightly shelled, sandy habitat for Western Snowy Plover, a federally-listed ground nesting shorebird. One plant was seen on September 5, 2006 (KB); a second plant was seen on September 12, 2006 (KB & KS), 63 m east of the first plant. Both plants were flowering and setting seed. Loose fragments of both plants were collected after elk trampled them during the discovery period (*K Sayce* WS, WTU).

Previous knowledge. The historic range of *Abronia umbellata* is from western Vancouver Island, British Columbia south along the coast to northern Baja California. In Washington, it was historically documented at four sites in Clallam and Kitsap Counties, but never in Pacific County.

Significance. In Washington, *Abronia umbellata* was previously thought to be extirpated; this is the first sighting since 1950. It is likely that *A. umbellata* historically occurred within Pacific County, but was never officially recorded. Removal of invasive *Ammophila* and leveling of dunes in the habitat restoration area allowed these plants to reestablish from seeds that

remained viable in a long-lived seed bank. Native *Abronias* are thought to prefer open sand conditions; these conditions were lost when *Ammophilas* began to dominate dunes along the southwest Washington coast some decades ago. In addition to Western Snowy Plover and *Abronia umbellata*, Streaked Horned Larks (*Eremophila alpestris strigata*) also nest in the habitat restoration area, bringing the total number of state or federally listed species present in this area of open sandy habitat to three.

—KIRSTEN BRENNAN, Willapa National Wildlife Refuge, 3888 SR 101, Ilwaco, WA 98624, kirsten_brennan@fws.gov, and KATHLEEN SAYCE, P. O. Box 91, Nahcotta, WA 98637, ksayce@shorebankpacific.com.

WYOMING AND COLORADO

CENTAUREA MONTANA L. (ASTERACEAE).—Wyoming, Fremont Co., Lander, directly W of the Pronghorn Lodge on the banks of the Middle Fork of the Popo Agie River at N 42.83273800 W 108.72612200; Habitat: disturbed, rocky/gravelly, 30–45% slope; Associated species: *Cynoglossum officinale*, *Euphorbia esula*, *Centaurea maculosa*, *Cirsium arvense*; surrounding overstory of cottonwood and some *Salix* spp.; elevation 5357 ft; plants appear to have escaped out of an ornamental planting and have moved down the river bank to the waters edge and downstream along the water at least 100 ft; plants appear to be producing significant numbers of seed (viability not yet checked), downstream plants probably established by seed (too far for creeping roots); S. F. Enloe & H. Enloe *s.n.*, 10 June 2006 (RM).

Previous knowledge. Though long-known to be invasive, this species is still widely cultivated in the United States, including Wyoming. In states adjacent to Wyoming it is reported to be escaped from cultivation and spreading in Bannock County, ID (Cronquist 1994, Intermountain Flora, Vol. 5, New York Botanical Garden, Bronx, NY) and Salt Lake County, UT (Welsh et al. 1993, A Utah Flora, 2nd ed., Brigham Young University, Provo, UT).

Significance. This is the first documentation of this species naturalizing in Wyoming following cultivation. Eight other species of *Centaurea* are officially listed as either noxious or declared by the State of Wyoming and this species bears guilt by association.

CHONDRILLA JUNCEA L. (ASTERACEAE).—Wyoming, Sublette Co., N side of Highway 191 between Pinedale and Jackson just past Granite Hot Springs turnoff, N 43°17.149′ W 110°32.200′, elevation 6357 ft. Roadside about 2 ft. from road below a cut bank in a mixed sagebrush, aspen, conifer community. Nearly bare ground apparently recently disturbed from work on a telephone-electrical box. Adrianne Peterson *s.n.*, 28 Aug 2006 (RM).

Previous knowledge. We know of two undocumented reports of this species being found in Wyoming previously: Medicine Lodge Creek, near Hyattville, Big Horn Co. in about 1998, and near Alpine Junction, Lincoln Co. in about 2005. This species is designated noxious by nine western states, four of these adjacent to Wyoming (USDA, NRCS. 2006-11-15. The PLANTS Database (http://plants.usda.gov). National Plant Data Center, Baton Rouge, LA). *Chondrilla juncea* is strongly favored by disturbance and is closely associated with *Bromus tectorum*, apparently following on the heels of cheatgrass infestations.

Significance. In other western states such as Idaho, this species has invaded disturbed and undisturbed plant communities and has interfered with wheat-harvesting machinery. This is the first documentation of this noxious weed in the state, and botanists should voucher and report any future Wyoming sightings to local weed control authorities to prevent costly infestations. Long term potential impacts are severe.

ECHIUM VULGARE L. (BORAGINACEAE).—Wyoming, Laramie Co., Near Cheyenne, railroad right of way embankment about 100 m South of Otto Road, N 41.09 W 105.05. Habitat: high plains grassland with *Cynoglossum officinale* and *Bromus tectorum*, elevation ca. 6100 ft. Bruce Shambaugh *s.n.*, August 2004 (RM). Wyoming, Laramie Co., near Cheyenne, Union Pacific Railroad tracks and vicinity along Otto Road, N41.09° W105.01°, elevation ca. 6700 ft.; both sides of RR track, road, and barbed wire fences; ca. 2 m stretch seen despite recent herbicide treatments; spreading away from road & railroad tracks into pastureland; Brasher, S. Franklin, & K. Nelson 3441, 10 Aug. 2006 (RM). Colorado, Grand Co., Kremmling, N 40.0601 W 106.3989, CO Highway 9 roadside on SE edge of town with *Bromus inermis*, 1 large single plant, S. F. Enloe *s.n.*, Aug 2005 (RM).

Previous knowledge. The first documentation of this species in Wyoming is Dorn 4371 (RM) in 1986, Laramie Co., near Cheyenne, followed by three other Dorn collections housed at RM (Albany & Uinta cos., 1992; Platte Co., 1993), then E. J. Hoffman *s.n.*, July 2000 in the Laramie Mountains, Laramie Co. The Kremmling, CO specimen is only the second specimen for Colorado at RM, with none being housed at COLO.

Significance. Echium vulgare is listed as a noxious weed in Washington. Though previously known from Colorado and Wyoming, this species was not perceived as a problematic weed requiring control efforts until the vicinity of Dorn's 1986 collection was revisited by Shambaugh. The infestation was mapped in 2004 (University of Wyoming Cooperative Agricultural Pest Survey (CAPS)http://uwadmnweb.uwyo.edu/capsweb/) and had spread to over 113 ha along an 8 km stretch of railroad tracks. Collectors should voucher and report other sightings of this weed in Wyoming and Colorado. This weed, like many other borages is poisonous to livestock due to its pyrrolizadine alkaloids, and like some other borages has long stiff hairs that cause contact dermatitis in humans.

RORIPPA AUSTRIACA (Crantz) Bess. (BRASSICACEAE).—Wyoming, Sublette Co., 2 m NE of Cora Highway on WY Highway 352 at Bootjack Ranch, N 42°58.254′ W 109°58.780′, elevation 7415 ft., just across fence from irrigated pasture, common here in the bottom of irrigation ditches. Currah *s.n.*, 1 August 2006 (RM). Sublette Co., ca. 3 m N of Cora, ca. 1 mi. E of WY Highway 352 on county road at N 42.98846 W 109.99312; ca. 7400 ft. elevation; roadside in pastureland, the infestation including cultivated fields, irrigation ditches, irrigated pasture, and roadsides, spanning

parts of multiple acres; 25 August 2006; Brasher, Enloe & Peterson 3475 (RM).

Previous knowledge. *Rorippa austriaca* is currently listed as a noxious weed in four states: Alaska, Arizona, California, and Washington. This weed is not on the Wyoming state noxious weed list, nor has it been declared in any county of Wyoming.

Significance. This is the first documentation of this noxious weed in Wyoming, and botanists should voucher and report any future Wyoming sightings to local weed control authorities to prevent costly infestations. Because this species grows in moist soil it has potential to invade ecologically important wet areas such as floodplains, and economically important agricultural lands including fields, pastures, and ditches.

— J. W. Brasher, S. F. Enloe, University of Wyoming Department of Plant Sciences, Dept. 3354, Laramie, WY 82071, A. Peterson, A. G. Currah, Sublette County Weed and Pest, P.O. Box 729, Pinedale, WY 82941, and B. E. Nelson, University of Wyoming, Rocky Mountain Herbarium (RM), Dept. 3165, Laramie, WY 82071.